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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,515	12/22/2000	John Baggs	81862P187	1054

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EXAMINER
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ELALLAM, AHMED

ART UNIT	PAPER NUMBER
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2668

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/746,515	<b>Applicant(s)</b> BAGGS ET AL.	
	<b>Examiner</b> AHMED ELALLAM	<b>Art Unit</b> 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This is responsive to RCA filed on 11/7/2005.

Claims 1-27 are pending.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al, US (6,747,995) in view of Watts et al, US (5,881,135). Hereinafter referred to respectively as Brown and Watts.

Regarding claims 1, 7, with reference to figures 2 and 5, Brown shows a digital signal processor(s) 501 in connection with a DRAM 505 (Dynamic Random access memory) and CAD (Content addressable memory) over an HPI bus 503. See column 10, lines 17-47.

The difference between claims 1, 7 and the teaching of Brown is that While Brown discloses that the DSP uses software (claimed service program) (Brown, column 11, lines 36-40), it doesn't specify that the software is delivered to the DSP from a memory over the HPI bus.

However, Watts discloses a DSP that has its control software (claimed service program) downloaded via an interconnected backbone from a memory (claimed overlay memory), the memory for storing a plurality of programs, see abstract, column 2, lines 16-31, column 8, lines 34, and claims 1 and 6.

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to modify the system of Brown using the downloading of software programs to the DSP(s) upon service requirement as taught by Watts. A person of skill in the art would be motivated to doing so by recognizing the flexibility of dynamically using any DSP for processing the incoming channel, (Watts, col. 8, lines 30-33). The advantage would be the ability to provide the system of Brown in view of Watts with DSP processing resources on as-needed basis. (Watts, col. 1, lines. 55-62).

Regarding claim 19, claim 19 has substantially the same scope of claim 1, in addition it specifies an interface that determines whether DSP needs a service program. It is inherent to Watts the presence of control means (claimed control manager interface) because that is needed for the selection of the program to be downloaded to the DSP(s) when it is required.

Regarding claims 2, 8, 14, with reference to figure 3, Brown discloses generating data packet from a pulse code modulated data stream using DSP(s) 301. See column 8, lines 9-11. (Claimed generating data packet from a pulse code modulated data stream using the service program).

Regarding claim 3, 9 and 15, with reference to figure 1, Brown shows PSTN network. (Claimed receiving the pulse code modulation data streams from a public switched telephone network).

Regarding claims 4, 10, and 16, with reference to figure 1, Brown shows the derived voice platform between the CO switch and a data network (the data network being the Internet). (Claimed transmitting the data packet over an Internet network).

Regarding claims 5, 11, 17, Brown discloses data packets being voice data packets. See column 8, lines 9-11. (Claimed data packet includes data comprising at least one of voice communication, fax communication, modem communication, and audio communication).

Referring to claims 6, 12 and 18, with reference to figure 1 and figure 3, Brown discloses generating data packet from a pulse code modulated data stream using DSP(s) 301. See column 8, lines 9-11. Brown also shows the derived voice platform between the CO switch and a data network (the data network being the Internet). (Claimed receiving a packet from an Internet protocol network, generating a pulse code modulation data stream from the packet using the service program and transmitting the pulse code modulation data stream over a public switched telephone network).

Regarding claim 13, claim 13 is a computer readable medium having instruction for implementing the method of claim 1, Brown in view of Watts do not disclose that the method is implemented using a computer readable medium using executable instruction. However, it would have been obvious to one skilled in the art at the time of the invention to implement the Brown in view of Watts's system in this manner because

the developmental costs of a software implementation are less than that of a hardware based implementation. Furthermore, software is easier to upgrade than hardware.

Regarding claim 20, Watts discloses the memory storing a plurality of programs; see abstract, and column 2, lines 18-24. (Claimed overlay memory to store a plurality of algorithms.

Regarding claim 21, as indicated above with reference to claim 1, the system of Brown in view of Watts comprises a DSP. (Figure 5, DSP 501). (Claimed apparatus further comprising the digital signal processor).

Regarding claim 22, with reference to figure 5, Brown shows a plurality of digital signal processors 501 connected to the host port interface bus 503. See column 10, lines 32-39.

Regarding claim 23, in addition to the inherency (Brown in view of Watts) of the means required to select a program from the memory as discussed above with reference to base claim 19, it is also inherent to Brown in view of Watts to have the means for managing the host port interface bus 503 (brown) because that is required for the data and control access to and from the HPI bus. (Claimed apparatus comprising a packet pump comprising the interface manager, and a host port interface bus manager coupled to the host port interface bus).

Regarding claim 24, Brown discloses a PSTN network coupled to transmit a pulse code modulation data stream See column 6, lines 34-49. (Examiner interpreted the transmission of the PCM of Brown as equivalent to the claimed transmission of PCM data streams to the packet pump).

Regarding claim 25, Brown discloses the use of SRAM by DSPs for program codes and data storage. See column 8, lines 12-13.

Regarding claims 26 and 27, Watts discloses the memory for storing a plurality of programs, see column 2, lines 16-31, column 8, lines 34, and claims 1 and 6 wherein one or more programs are downloaded to the one or more DSP from the main memory, see also column 21, lines 43-49.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Gillespie US (5,898,858); Welin, US 2002/0031086; Buchanan et al, US 6,556,676); Mojaver et al, US (6,567,881); Locascio, US (6,603,757); Turner et al, 6,707,825); Ray et al, US 6,829,249).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
Art Unit 2668  
February 13, 2006



JOHN PEZZLO  
SENIOR EXAMINER